

SERVICE BULLETIN #2

15 March 1981 Page 1 of 2

Subject: Rudder Bar Assembly.

Models Affected: All M-4 and M-5 Series Aircraft.

M-4 Series: S/N 4 to 94, 1001 to 1045, 1S to 3S, 1T to 3T,
1C to 11C; M-4-210C, S/N 1001C to 1117C; M-4-220S, S/N 2001S;
M-4-220C, S/N 2001C to 2190C; M-4-180C, S/N 3001C to 3006C.

M-5 Series: M-5-220C, S/N 5001C to 5057C; M-5-210C, S/N 6001C to 6204C; M-5-235C, S/N 7001C to 7254C; M-5-180C, S/N 8001C, and M-5-210TC, S/N 9001C.

Compliance time: Within the next 25 hours of flight, or 60 days.

This Service Bulletin is mandatory.

Authority: This Bulletin is FAA approved.

Background: There is a possibility that the horizontal tubes of the rudder bar may be cracked or may become cracked where "V" cluster attaches.

#### Action to be taken, and instructions:

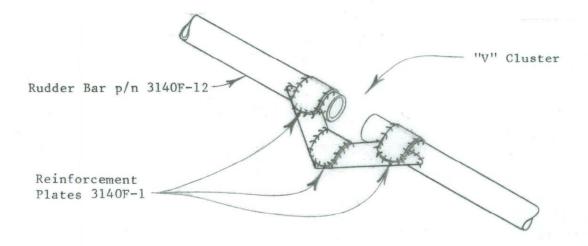
1. Remove rudder bar cover forward of control column, then remove rudder bar.

This can be performed by the following procedure:

- a. Remove rudder cables, return spring and rudder trim cable.
- b. Remove master brake cylinders from rudder pedals.
- c. Remove the (6) six bolts holding rudder bar to frame, then remove from aircraft and inspect for cracks where "V" cluster attaches.
- Inspect for cracks visually, if cracks are found contact Maule Aircraft Corporation prior to further flight (phone 912-985-2045). New modified rudder bar halve with "V" cluster P/N 3140F-12 is available upon request.
- 3. If no cracks are found, reinforce rudder bar as follows:
  - a. Separate rudder bar by removing bolt in inboard co-pilot pedal tube at cluster.
  - b. Insert a rod in horizontal tube at cluster to prevent weld penetration buildup inside when welding new parts on.

#### 3. (con't)

c. Locate and weld reinforcement plates p/n 3140F-1 as shown in sketch:



- d. After welding, clean affected area and repaint.
- 3. Aircraft return to service:
  - a. Lubricate rudder bar and reassemble the two halves.
  - b. Reverse procedures 1. a. b. & c.
  - c. Inspect installation and reinstall rudder bar cover.
- 4. Add statement to the aircraft log book pertaining to compliance with this service bulletin. Also, fill out the enclosed compliance record and return to Maule Aircraft Corporation as soon as possible.

## Availability of parts:

The following parts are furnished with this service bulletin:

3 ea. reinforcement plates (p/n 3140F-1).

## Effectivity date:

This service bulletin is effective upon receipt.

Maule Hirchall (9400 uuu 100 SPENCE AIR BASE :- MOULTRIE, GEORGIA 31/168 -:- PHONE 912/985-2045

COMPLIANCE RECORD



# SERVICE BULLETIN #2

	DATED
Aircraft Model	
Serial Number	
Registration Number	
The following action has been tak Service Bulletin #2:	en in respect to this
$\frac{NO}{\text{were welded in place per Serv}}$	procement plates p/n 3140F-1 vice Bulletin #2.
CRACKS were found in rudder by part replaced by new rudder by	par at "V" cluster. Defective par p/n 3140F-12.
area(s) repaired per Maule Ai	par at "V" cluster. Defective ircraft instructions. Also, et, cracks found and how repaired.
I no longer own this aircraft	. It was sold to:
Name	
Address	
City, State, Zip	
CERTIFIED BYSignature	
TITLE	
Owner, A & P, IA, etc.	
DATE PERFORMED	
In an effort to keep our mailing the following:	list current, please fill in
Owner's name	
Owner's address	
Mail this compliance record to:	Maule Aircraft Corporation Engineering Records Spence Field Moultrie, GA 31768